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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	CCR	text	interpretation text	clarification text
EOC-2020#A	4320	mission critical	FOS	functional	test	un-verified	test	un-verified		The EOC shall generate the long-term spacecraft operations plan, based upon, at a minimum, the following: a. LTSP from the IWG. b. LTIP from the IWG. c. Spacecraft maneuvers and other spacecraft activities that have potential to impact mission operations	A: Based on scheduled activities.	
EOC-2030#A	4327	mission critical	FOS	functional	demo	un-verified	demo	un-verified		The EOC shall store and maintain EOS planning and scheduling information, which includes, at a minimum, the following: a. IWG science guidelines, as specified in the LTSP and LTIP b. Long-term spacecraft operations plan c. Predicted availability of the spacecraft resources d. Baseline activity profile for each applicable instrument e. Planning and scheduling information received from the FDF f. Preliminary resource schedules, including TDRSS contact times g. Detailed activity schedules, including TDRSS contact times	A: Basic functionality provided. Scheduled activities (including activity modes and resource usage), BAP definitions, and activity definitions.	

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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOC-2220#A	4378	mission critical	FOS	function al	test	un-verified	test	un-verified		The EOC shall identify and resolve conflicts based on, at a minimum, the following: a. Resources needed for each observation or instrument support activity b. Resources needed for each spacecraft subsystem activity, if applicable c. Inter-instrument dependency d. In situ observation dependency e. Priorities set by the LTSP	A: Basic functionality provided. Conflicts based on resource usage.	
EOC-2270#A	4380	mission critical	FOS	function al	demo	un-verified	demo	un-verified		The EOC shall accept an instrument resource profile or instrument resource deviation list (when a resource profile exists for the instrument) from each ICC.	An activity must exist in the mission schedule to reserve resources that originate from within an ICC resource profile; . A: Basic functionality provided.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.

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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOC-2272#A	4381	mission critical	FOS	function al	test	un-verified	test	un-verified		For the instruments that have resource deviations lists, the EOC shall build instrument resource profiles by combining the resource deviation lists with the respective baseline resource profiles.	An activity must exist in the mission schedule to reserve resources that orginate from within a resource deviation list.; A: Basic functionality provided.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
EOC-2280#A	4382	mission critical	FOS	function al	test	un-verified	test	un-verified		At least once each week, the EOC shall generate for each spacecraft a preliminary resource schedule that describes all operations currently planned for the following target week.	The mission schedule represents a continuous plan which encompasses the preliminary resource schedule. ; A: Basic functionality provided.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.

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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOC-2290#A	4383	mission critical	FOS	function al	demo	un-verified	demo	<u>un-verified</u>		Whenever the ICCÍs instrument resource profile cannot be integrated into a preliminary resource schedule, the EOC shall provide the ICC with a notification that includes, at a minimum, an identification of the conflicting activities and the source of conflict.	The mission schedule represents a continuous plan which encompasses the preliminary resource schedule.	<u>Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.</u>
EOC-2300#A	4384	mission critical	FOS	function al	test	un-verified	test	<u>un-verified</u>		The EOC shall build or update the preliminary resource schedule based on the following, at a minimum: a. Existing preliminary resource schedules, if any b. Instrument resource profiles c. Spacecraft subsystems resource profile d. Science guidelines e. Spacecraft operations constraints f. TDRSS schedule	A: Basic functionality provided. <u>Based on scheduled activities.</u>	<u>Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.</u>

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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOC-2310#A	4385	mission critical	FOS	function al	test	un-verified	test	un-verified		The EOC shall build a preliminary resource schedule by performing the following: a. Integrating the spacecraft subsystems resource profile and individual instrument resource profiles b. Determining if required resources, including SN resources, are within limits c. Using guidelines established by the LTSP d. Resolving conflicts between the proposed activities	A: Basic functionality provided. Based on scheduled activities.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
EOC-2320#A	4386	mission critical	FOS	function al	inspe ction	un-verified	inspe ction	un-verified		The preliminary resource schedule shall include, at a minimum, the following: a. Activity or DAR identifiers b. Resource availability and usage requirements c. Time constraints and alternatives for planned activities d. TDRSS schedule	The mission schedule represents a continuous plan which encompasses the preliminary resource schedule. ; A: Basic functionality provided. Scheduled activities (includes modes and resources), DAR IDs from ASTER GDS.	Instrument resource profiles, activity lists, & deviation lists are equiv-alent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.

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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOC-2350#A	4387	mission critical	FOS	function al	dem o	un-verified	dem o	un-verified		The EOC shall provide the preliminary resource schedule to the ICCs upon generation.	The mission schedule represents a continuous plan which encompasses the preliminary resource schedule. ─;─A:─ Basic functionality provided.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
EOC-2460#A	4392	mission critical	FOS	function al	test	un-verified	test	un-verified		The EOC shall be capable of generating or updating a spacecraft subsystem activity list based on at a minimum the following: a. Existing detailed activity schedule b. Preliminary resource schedule c. Spacecraft subsystem activities identified after the preliminary resource schedule has been generated d. Current predicted orbit data and related information e. Responses to emergency/contingency situations	A: Basic functionality provided. Based on scheduled activities.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.

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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOC-2480#A	4394	mission critical	FOS	function al	dem o	un-verified	dem o	un-verified		The EOC shall accept from each ICC an instrument activity list or an instrument activity deviation list (when an activity profile exists for the instrument) and any updates thereto.	The mission schedule represents a continuous plan which encompasses activity deviations and BAPs. ̲;̲ Basic functionality provided.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
EOC-2482#A	4395	mission critical	FOS	function al	test	un-verified	test	un-verified		For the instruments that have instrument activity deviation lists, the EOC shall build the instrument activity lists by combining the instrument activity deviation lists with the respective baseline activity profiles.	A: Basic functionality provided.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments. Scheduling of activities and activity lists.

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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOC-2490#A	4396	mission critical	FOS	function al	test	un-verified	test	<u>un-verified</u>		For each day the EOC shall be capable of generating or updating a detailed activity schedule for each spacecraft and its instruments, nominally covering the next 7 days.		<u>Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.</u>
EOC-2510#A	4397	mission critical	FOS	function al	test	un-verified	test	<u>un-verified</u>		The EOC shall generate a detailed activity schedule for the spacecraft and its instruments by: a. Integrating the spacecraft subsystem activity list and individual instrument activity lists b. Determining if the aggregate resource requirements are within limits d. Ensuring that all the sequencing constraints among the proposed activities are respected e. Scheduling the spacecraft recorder, direct downlink, and communication subsystem operations	The mission schedule represents a continuous plan which encompasses the generation of a detailed activity schedule. <u>A:By scheduling activities and checking resource usage.</u>	<u>Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.</u>

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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOC-2540#A	4400	mission critical	FOS	function al	test	un-verified	test	un-verified		The EOC shall notify the ICC of any instrument activities that cannot be integrated into a detailed activity schedule.	A: Basic functionality provided.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
EOC-2550#A	4401	mission critical	FOS	function al	test	un-verified	test	un-verified		The detailed activity schedule shall include, at a minimum, the following: a. Instrument activities b. Spacecraft activities necessary to support all instrument activities c. Spacecraft activities necessary for the spacecraft subsystem maintenance d. Spacecraft resource requirements for each activity e. Traceability of instrument activities to DARs		Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.

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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOC-2620#A	4406	mission critical	FOS	function al	test	un-verified	test	un-verified		The EOC shall provide the ICC with the detailed activity schedule and any updates upon generation.	The mission schedule represents a continuous plan which encom-passes the generation of a detailed activity schedule; Basic functionality provided.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
EOC-3090#A	4413	mission critical	FOS	function al	test	un-verified	test	un-verified		As frequently as necessitated by the detailed activity schedule, the EOC shall build a spacecraft and instrument memory load, which includes as many of the following as needed: a. SCC-stored spacecraft and instrument commands b. SCC-stored spacecraft and instrument tables c. Instrument loads d. SCC software updates.	A: Basic functionality provided. Limited ATC load, tables, and microprocessor loads.	
EOC-3160#A	6323	mission critical	FOS	function al	dem o	un-verified	dem o	un-verified		The EOC shall generate operational reports.	A:~~Microprocessor Load Reports and Table Load Reports.~~ Sybase reports and some informal reports available.	

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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOC-4005#A	4414	mission critical	FOS	function al	test	un-verified	test	un-verified		The EOC shall be capable of transmitting commands to the EOS spacecraft via EDOS using the: a. SN b. GN, DSN, WOTS (for contingency or emergency operations)	A: SN only	
EOC-4020#A	4484	mission critical	FOS	function al	test	un-verified	test	un-verified		The EOC shall merge the real-time commands supplied by the spacecraft operator, command groups, and the spacecraft and instrument memory loads into one uplink stream.	A: Basic functionality provided. Real time commands only.	
EOC-4200#A	4540	mission critical	FOS	function al	test	un-verified	test	un-verified		The EOC shall support several uplink rates to the spacecraft, which include at a minimum the following: a. 10 kilobits per second (kbps) (SSA uplink) b. 1 kbps (SMA uplink) c. 125 bits per second (bps) (SSA uplink during contingency operations) d. 2 kbps (emergency operations via S-band DSN link)	A: Limited uplink capability as defined in Level 4 requirements.	
EOC-5010#A	4544	mission critical	FOS	function al	anal ysis	un-verified	anal ysis	un-verified		The EOC shall receive from EDOS the following telemetry data types in CCSDS packets containing: a. Real-time spacecraft and instrument housekeeping data b. Spacecraft recorder housekeeping data c. SCC memory dump data	A: RT HK data.	

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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOC-6010#A	4580	mission critical	FOS	function al	test	un-verified	test	un-verified		The EOC shall provide the capability to perform analysis on real-time telemetry data and spacecraft recorder housekeeping data.	A: RT HK data.
EOC-6060#A	4585	mission critical	FOS	function al	test	un-verified	test	un-verified		The EOC shall provide the capability to plot a specified parameter against another parameter or against time.	A: Basic functionality provided. Limited plot capability as defined in the Level 4 requirements.
EOC-7010#A	4592	mission critical	FOS	function al	demo	un-verified	demo	un-verified		The EOS Data Base spacecraft and instrument database, referred to as the Project Data Base (PDB) shall include at a minimum the following: a. Housekeeping data formats b. Housekeeping data parameter descriptions c. Command descriptions d. Syntactical rules for commands and operator directives e. Operator directives f. Display formats g. Planning and scheduling definitions and constraints i. Report formats j. NCC configuration codes l. Telemetry parameter limits m. Characteristics of spacecraft and its instruments n. Command validation parameters o. Operations procedures	A: Basic functionality provided. as defined in Level 4 requirements.

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Table 1 - RbR Change Table: This table identifies modifications to existing EOC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOC-7060#A	4604	mission critical	FOS	function al	test	un-verified	test	un-verified		The EOC shall maintain a history log for the spacecraft and instruments for the most recent 7 days, including at a minimum the following: a. All messages sent and received b. Telemetry data c. Operator requests/directives d. Real-time commands e. Stored command loads f. Memory loads and dumps g. Limits violations h. Error conditions i. Warnings k. Spacecraft and instrument status information l. Executed schedules m. Analysis results n. Responses to operator requests o. User interface language procedures as they were executed p. EOC reconfiguration information q. Master ground image	A: Limited archive and event messages.	
EOC-8110#A	4614	mission critical	FOS	function al	dem o	un-verified	dem o	un-verified		The EOC shall support ongoing operations.	A: scheduling interfaces with ICCs only	
EOC-8140#A	6332	mission critical	FOS	function al	test	un-verified	test	un-verified		The EOC shall manage initialization and shutdown of EOC functions.	A: Initialization	

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Table 2 - RbR Change Table: This table identifies modifications to existing ICC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	CCR	text	interpretation text	clarification text
ICC-2020#A	5264	mission essential	FOS	functional	demo	un-verified	demo	un-verified		Upon request from the PI/TL at the IST, the ICC shall provide the IST with planning and scheduling information, which includes, at a minimum, the following: a. LTSP and LTIP b. Current resource availability information c. Current predicted orbit data and related information. d. Plans and schedules	A: Basic functionality provided. Scheduled activities (includes modes and resource usage).	
ICC-2050#A	5266	mission critical	FOS	functional	test	un-verified	test	un-verified		The ICC shall identify and resolve instrument planning and scheduling conflicts of its instrument based on, at a minimum, the following: a. Resource and time constraints b. In situ observation dependency c. Coordinated observation dependency among instruments d. Priorities set by the LTSP and LTIP	A: Basic functionality provided. Resource conflicts identified.	

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Table 2 - RbR Change Table: This table identifies modifications to existing ICC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

ICC-2140#A	5272	mission critical	FOS	function al	test	un-verified	test	un-verified		At least once each week, the ICC shall build an instrument resource profile or an instrument resource deviation list (when a baseline resource profile exists for the instrument), which includes a description of instrument operations currently planned for the target week.	The mission schedule represents a continuous plan that encompasses instrument resource profiles and deviations; A:_ Basic functionality provided.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
ICC-2150#A	5273	mission critical	FOS	function al	test	un-verified	test	un-verified		The ICC shall accept from the EOC a notification of rejection of its instrument activities proposed in the instrument resource profile or instrument resource deviation list.	A: Basic functionality provided.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.

Table 2 - RbR Change Table: This table identifies modifications to existing ICC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

ICC-2190#A	6169	mission critical	FOS	function al	test	un-verified	test	un-verified		The ICC shall build or update its instrument resource profile, or when a resource profile exists, its instrument resource deviation list, based, at a minimum, on the following: a. PI/TL provided instrument deviation requests b. LTSP and LTIP c. Current resource availability d. Current predicted orbit data and related information	A: Basic functionality provided. Scheduled activities (includes modes and resources).	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
ICC-2210#A	6171	mission critical	FOS	function al	test	un-verified	test	un-verified		The ICC shall ensure that its instrument resource profile contains no internal conflicts.		Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.

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Table 2 - RbR Change Table: This table identifies modifications to existing ICC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

ICC-2220#A	4705	mission critical	FOS	functional	demo	un-verified	demo	<u>un-verified</u>		The ICC shall be able to generate the instrument resource profile in both machine usable and human readable forms.	A: Basic functionality provided.	<u>Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.</u>
ICC-2230#A	4711	mission critical	FOS	functional	demo	un-verified	demo	<u>un-verified</u>		When generated, the ICC shall provide the EOC with its instrument resource profile or, when a resource profile exists, an instrument resource deviation list.		<u>Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.</u>

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Table 2 - RbR Change Table: This table identifies modifications to existing ICC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

ICC-2250#A	4713	mission critical	FOS	functional	test	un-verified	test	un-verified		The ICC shall accept the preliminary resource schedule from the EOC.		Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
ICC-2270#A	4717	mission critical	FOS	functional	test	un-verified	test	un-verified		For each day the ICC shall be capable of generating or updating, an instrument activity list or an instrument activity deviation list (when an activity profile exists for the instrument) nominally covering the next 7 days.	A: Basic functionality provided.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.

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Table 2 - RbR Change Table: This table identifies modifications to existing ICC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

ICC-2280#A	6173	mission critical	FOS	function al	test	un-verified	test	un-verified		The ICC shall generate or update the instrument activity list, or when a baseline activity profile exists, the instrument activity deviation list, based, at a minimum, on the following: a. PI/TL provided instrument deviation requests. b. LTSP and LTIP c. Preliminary resource schedule d. Current resource availability information e. Current predicted orbit data and related information f. Responses to contingency/emergency conditions g. Rejection notification from the EOC of the activities that cannot be accommodated in the detailed activity schedule	A: Basic functionality provided. Scheduled activities (includes modes and resources).	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.

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Table 2 - RbR Change Table: This table identifies modifications to existing ICC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

ICC-2290#A	6175	mission critical	FOS	function al	test	un-verified	test	<u>un-verified</u>		The ICC shall generate the instrument activity list or the instrument activity deviation list (when an activity profile exists for the instrument) in both machine- usable and human-readable forms, to describe for each activity, at a minimum, as many of the following that apply: a. Activity identifier including traceability to PI/TL provided deviation requests. b. Objectives c. Resource requirements d. Start time constraints and duration e. Instrument modes as a function of time f. Pointing angles and field of view (FOV) g. Specified tolerance limits h. Disturbances caused for each instrument mode	A: <u>Basic</u> ~~BASIC~~ functionality provided.	<u>Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments</u>
ICC-2390#A	4759	mission critical	FOS	function al	test	un-verified	test	<u>un-verified</u>		The ICC shall provide the EOC with the instrument activity list or instrument activity deviation list (when an activity profile exists for the instrument) and any updates thereto, when generated.		<u>Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.</u>

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Table 2 - RbR Change Table: This table identifies modifications to existing ICC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

ICC-2400#A	4763	mission critical	FOS	function al	test	un-verified	test	un-verified		The ICC shall have the capability to update the instrument activity list or instrument activity deviation list (when an activity profile exists for the instrument) in response to instrument malfunctions or other special events that affect the continuation of the existing schedule.		Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
ICC-2420#A	4766	mission essential	FOS	function al	test	un-verified	test	un-verified		The ICC shall send to the IST the generated instrument activity list (or instrument activity deviation list) to be reviewed and/or approved by the PI/TL.		Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
ICC-2430#A	4769	mission essential	FOS	function al	test	un-verified	test	un-verified		The ICC shall notify the PI/TL at the IST of any problems encountered while building or updating its instrument activity list (or instrument activity deviation list).		Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.

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Table 2 - RbR Change Table: This table identifies modifications to existing ICC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

ICC-4020#A	5402	mission critical	FOS | CSMS	function al	test	un-verified	test	<u>un-verified</u>		The ICC shall provide the capability to accept CCSDS packets from EDOS containing at a minimum the following data types: a. Spacecraft and instrument housekeeping data b. Instrument engineering data or instrument science data within which instrument engineering data is embedded c. Instrument memory dump data	A: AM-1 only~~; Only the GSFC and LARC DAACS will interface with EDOS~~.
ICC-4040#A	5403	mission essential	FOS	function al	test	un-verified	test	<u>un-verified</u>		The ICC shall be capable of simultaneously receiving real-time and spacecraft recorder data for all housekeeping and instrument engineering data types.	<u>A: RT HK data</u>
ICC-4410#A	5417	mission critical	FOS	function al	test	un-verified	test	<u>un-verified</u>		The ICC shall provide the capability to perform analysis on real-time data, spacecraft recorder data, and data from the ICC history log.	A: Basic functionality provided. <u>RT HK data.</u>
ICC-4450#A	5420	mission critical	FOS	function al	test	un-verified	test	<u>un-verified</u>		The ICC shall provide the capability to plot specified parameters against other specified parameters or against time.	A: Basic functionality provided. <u>Limited plot capability as defined in the Level 4 requirements.</u>

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Table 2 - RbR Change Table: This table identifies modifications to existing ICC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

ICC-4710#A	6178	mission critical	FOS	function al	inspecti on	un- verified	inspect ion	un-verified	The ICC Instrument Data Base (IDB) shall include at a minimum the following: a. Instrument housekeeping data formats b. Instrument engineering data formats c. Housekeeping and engineering parameter descriptions d. Command descriptions e. Syntactical rules for commands and operator directives f. Operator directives g. Display formats h. Planning and scheduling definitions and constraints i. Analysis algorithms j. Report formats k. Derived telemetry parameter equations l. Parameter limits m. Instrument characteristics n. Command validation parameters	A: Basic functionality as defined in the Level 4 requirements.	

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Table 2 - RbR Change Table: This table identifies modifications to existing ICC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

ICC-4780#A	6180	mission critical	FOS	function al	test	un-verified	test	un-verified		The ICC shall maintain a history log of instrument and ICC activities for at least 7 days, including at a minimum the following: a. All messages sent and received b. Engineering and housekeeping data c. Operator requests/directives and responses d. Commands e. Microprocessor loads and dumps f. Limits violations g. Error conditions h. Instrument status data i. Executed schedules j. Analysis results k. Instrument calibration parameters l. Spacecraft status information m. ICC reconfiguration information	A: Limited archive and event messages.	
ICC-6070#A	6340	mission critical	FOS	function al	test	un-verified	test	un-verified		The ICC shall manage initialization and shutdown of ICC functions.	A: Initialization	
ICC-7214#A	5454	mission essential	FOS	function al	test	un-verified	test	un-verified		The IST shall interface with the ICC to receive notification of request for instrument support activity receipt.	A: Basic functionality provided. Timeline display of scheduled activities.	

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Table 2 - RbR Change Table: This table identifies modifications to existing ICC requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

ICC-7220#A	5455	mission essential	FOS	function al	test	un-verified	test	un-verified		The IST shall have the capability to request and accept from the ICC planning and scheduling information, which includes, at a minimum, the following: a. LTSP and LTIP goals and priorities b. Current resource availability information c. Current predicted orbit data and related information d. Plans and schedules	A: Basic functionality provided. Timeline display of scheduled activities.	Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
ICC-7460#A	5460	mission essential	FOS	function al	test	un-verified	test	un-verified		The IST shall provide the capability to display and process the raw or engineering unit converted instrument engineering data.		Engineering data embedded in the HK stream only.

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Table 3 - RbR Change Table: This table identifies modifications to existing EOSD requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	CCR	text	interpretation text	clarification text
EOSD0502#A	4780	mission essential	FOS | SDPS	functional	demo	un-verified	demo	un-verified		ECS shall provide an integrated set of toolkits consisting of software tools for each ECS element.	A: IST toolkit delivery does not include source code.Enhanced PGS toolkits, PI/TL ISTs, IMS.	
EOSD1010#A	4810	mission critical	FOS | SDPS | CSMS	performance	test	un-verified	test	un-verified		ECS shall support daily data volume, processing load, storage volume, instrument support, and data traffic as derivable from and specified in Appendix C and D.	FOS applicability: instrument support only. The FOS/EOC requirement is met through the use of CSMS services.	
EOSD1502#A	6318	mission critical	FOS | SDPS | CSMS	interface	demo	un-verified	demo	un-verified		ECS elements shall use EBnet for data communications for the following types of data: a. Production data sets (Level 0 data) b. Expedited data sets c. Real-time data (for health and safety) d. Command data e. Data requested from back-up archive f. TDRSS schedule requests g. Data exchange with the FDF h. Production Data Transfers between DAACs i. Management Data exchange with SMC j. Data Products Exchange with ADCs, IPs, and Others	A: Tto support AM-1 testing. A: Note that data exchange with FDF is SOW requirements!! A: CONCERN HERE IS EXPECTED READINESS OF FDF FOR RELEASE A I/F TESTING. NOTE THAT FOR RELEASE A N/A IF FDF IS NOT READY, BUT EOC FUNCTIONALITY SHOULD BE THERE TO ACCOMODATE IT! FOS A: Real time data (health and safety), commands, limited exchange with NCC and FDF.	
EOSD1600#A	4825	mission essential	FOS | CSMS	interface	test	un-verified	test	un-verified		The ECS elements that interface with EDOS elements shall exchange element level status data with EDOS.	A: FOR STATUS EXCH-ANGES BETWEEN EOC AND EDOS CODAS AND TSS SUMMARY REPORTS FROM EDOS; ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS.	

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Table 3 - RbR Change Table: This table identifies modifications to existing EOSD requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

EOSD1770#A	4839	mission essential	FOS | SDPS | CSMS	interface	test	un-verified	test	un-verified		ECS elements shall exchange the following types of data at a minimum with the IPs: a. Instrument command loads b. Science data c. Planning and scheduling data d. Directories e. Product Orders	Planning and scheduling data includes instrument stored commands. A: Llimited interface testing with ASTER (selected planning and scheduling data). Note: Instrument command load information is included in planning and scheduling data.	
EOSD1990#A	6458	mission essential	FOS | SDPS | CSMS	security	anal ysis	un-verified	insp ecti on	un-verified		The ECS system and elements shall employ security measures and techniques for all applicable security disciplines which are identified in the preceding documents. These documents shall provide the basis for the ECS security policy.	The FOS/EOC requirement is met through the use of CSMS services. A: Aas determined in the technical security planning policy activity documented in EOSD2100.	
EOSD2510#A	4847	mission critical	FOS | SDPS | CSMS	security	de mo	un-verified	de mo	un-verified		ECS elements shall maintain an audit trail of: a. All accesses to the element security controlled data b. Users/processes/elements requesting access to element security controlled data c. Data access/manipulation operations performed on security controlled data d. Date and time of access to security controlled data e. Unsuccessful access attempt to the element security controlled data by unauthorized users/elements/processes f. Detected computer system viruses and worms g. Actions taken to contain or destroy a virus	The FOS/EOC requirement is met through the use of CSMS services.	

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Table 3 - RbR Change Table: This table identifies modifications to existing EOSD requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

										text	interpretation text	clarification text
EOSD2550#A	4848	mission critical	FOS | SDPS | CSMS	security	test	un-verified	test	un-verified		The ECS elements shall limit use of master passwords or use of a single password for large organizations requiring access to a mix of security controlled and non-sensitive data.	The FOS/EOC requirement is met through the use of CSMS services.	
EOSD2660#A	5075	mission essential	FOS | SDPS | CSMS	security	demo	un-verified	demo	un-verified		ECS elements shall at all times maintain and comply with the security directives issued by the SMC.	The FOS/EOC requirement is met through the use of CSMS services.	
EOSD2710#A	5077	mission essential	FOS | SDPS | CSMS	security	demo	un-verified	demo	un-verified		ECS elements shall report all detected computer viruses and actions taken to the SMC.	The FOS/EOC requirement is met through the use of CSMS services.	
EOSD2990#A	6417	mission critical	FOS | SDPS | CSMS	security	demo	un-verified	demo	un-verified		The ECS elements shall support the recovery from a system failure due to a loss in the integrity of the ECS data or a catastrophic violation of the security system.	The FOS/EOC requirement is met through the use of CSMS services. A: Aat each DAAC as activated by the release recovery of higher level products by reprocessing of Level 0 if needed. A: at the SMC and EOC to support system failures.	
EOSD3000#A	6418	mission critical	FOS | SDPS | CSMS	security	demo	un-verified	demo	un-verified		The ECS shall provide for security safeguards to cover unscheduled system shutdown (aborts) and subsequent restarts, as well as for scheduled system shutdown and operational startup.	The FOS/EOC requirement is met through the use of CSMS services. For each site as applicable to site activation.	
EOSD3490#A	5094	mission fulfillment	FOS | SDPS | CSMS	RMA	demo	un-verified	demo	un-verified		Reliability statistics for ECS shall be collected and monitored using the Mean Time Between Maintenance (MTBM) for each component and operational capability.	The FOS/EOC requirement is met through the use of CSMS services. A: Aapplicable DAACs.	

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Table 4 - RbR Change Table: This table identifies modifications to existing AM1 requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

RBR_id	req_k	req_cate	segmen	req_type	s_ve	s_verif_s	a_ve	a_verif_	CCR	text	interpretation text	clarification text

	ey	gory	t		rif_ meth od	tat	rif_ meth od	stat				
AM1-0020#A	6358	mission essential	FOS | CSMS	interface	test	un-verified	test	un-verified		The EOC shall have the capability to send (via EDOS/EBnet and the SN, GN, DSN, or WOTS) and the AM-1 spacecraft shall have the capability to receive spacecraft commands in CCSDS CLTUs (as defined in AM-1 ICD 106).	A: SN Only	
AM1-0050#A	6362	mission essential	FOS | CSMS	interface	test	un-verified	test	un-verified		The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) real time AM-1 spacecraft and instrument housekeeping telemetry packets (as defined in AM-1 ICD 106) via EDOS/EBnet and the SN, GN, DSN, or WOTS interfaces.	A: SN Only	
AM1-0070#A	6364	mission essential	FOS | CSMS	interface	test	un-verified	test	un-verified		The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets) recorded AM-1 spacecraft and instrument housekeeping telemetry packets (as defined in AM-1 ICD 106) via EDOS/EBnet and the SN, GN, DSN, or WOTS interfaces.	A: SN Only	

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Table 5 - RbR Change Table: This table identifies modifications to existing ASTER requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	CCR	text	interpretation text	clarification text
ASTER-0210#A	91	~~TBD~~ mission essential	FOS	interface	~~TBD~~ test	un-verified	test	un-verified		ASTER GDS shall have the capability to send and ECS shall have the capability to receive ASTER instrument resource profiles and instrument resource deviation lists (when a resource profile exists).		Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
ASTER-0220#A	93	~~TBD~~ mission essential	FOS	interface	~~TBD~~ test	un-verified	test	un-verified		ECS shall have the capability to send and ASTER GDS shall have the capability to receive a notification when ASTER instrument resource profile information cannot be integrated into the preliminary resource schedule.		Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.
ASTER-0240#A	5655	~~TBD~~ mission essential	FOS	interface	~~TBD~~ test	un-verified	test	un-verified		ASTER GDS shall have the capability to send and ECS shall have the capability to receive instrument activity lists and instrument activity deviation lists (when an activity list exists) and any updates thereto.		Instrument resource profiles, activity lists, & deviation lists are equivalent to activities. Mode transitions in activity definitions define resource usage. Preliminary resource schedules and activity schedules are equivalent to mission schedules; mission schedules are integrated schedules containing scheduled activities for a spacecraft & its instruments.